



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,654	06/28/2001	Manoel Tenorio	020431.0841	6772
53184 7590 09/19/2007 i2 TECHNOLOGIES US, INC. ONE i2 PLACE, 11701 LUNA ROAD DALLAS, TX 75234			EXAMINER RIMELL, SAMUEL G	
			ART UNIT 2164	PAPER NUMBER
			MAIL DATE 09/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/895,654

Applicant(s)

TENORIO, MANOEL

Examiner

Sam Rimell

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

Art Unit: 2164

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vedula et al. (U.S. Patent 6,823,495).

Claim 1: Col. 1, line 24 refers to a global content directory in the form of the Internet. This directory is provided to buyers and sellers (col. 1, lines 27-28 “customers and trading partners”).

FIG. 5 illustrates a graphical user interface which defines a schema translation tool which translates schema (4) to schema (10). The tool is coupled to the global content directory (coupled to Internet—col. 17, lines 44-46). Since mapping is accomplished between the schemas, the schema translation tool is a mapping module.

The mapping module (graphical interface) receives a source schema (4) on the left side and target schema (10) on the right side.

Each schema is a taxonomy (i.e. a classification arrangement) comprised of a hierarchy of classes defined by records. For example, “Record 11” in the source schema (4) is a parent class and all indented items below “Record 11” are subclasses. The source and target taxonomies can be different from one another, such as illustrated in FIG. 5 where the arrangement of classes and subclasses on the left side is different from that on the right side.

Both the source schema and target schema define an ontology (i.e. relationships between records, such as the relationship of parent class to subclass or source schema to target schema).

Art Unit: 2164

As seen in FIG. 3C, each record has defined attributes, thus the ontologies in both the source schema and the target schema contain attributes.

Referring back to FIG. 5, classes (referring to either parent classes or subclasses) in the source schema can be associated to classes (referring to either parent classes or subclasses) in the target schema. The association is achieved by the mappings (16a) and (16b).

The ontology generation module is the processing engine (26) and map (28) illustrated in FIG. 2 which support the creation of the graphical interface in FIG. 5.

Vedula et al. differs in that the individual records are not specifically referring to products, but are generic business document records (col. 3, line 10). Forming the records to contain non-functional descriptive material, such as product information, would have been obvious to one of ordinary skill in the art (*In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983): “when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability”).

Claim 2: User input in the form of highlighting (18a in FIGS. 4A and 4B) achieves the function of indicating which source classes are to be associated with which target classes. The association is established when lines (16a) or (16b) link the source and target schemas. The definition of the users as “buyers” is non-functional descriptive material, obvious to the person of ordinary skill in the art (*In re Gulack*). Nonetheless, either of the “customers or trading partners” (col. 1, lines 27-28) can be the claimed buyers or sellers providing input to the system.

Claim 3: FIG. 5 is a view of a graphical user interface, and thus is a graphical representation of the taxonomies of the source and target schemas as well as the associations

Art Unit: 2164

between the schemas seen by the user. The definition of the users as “buyers” is non-functional descriptive material, obvious to the person of ordinary skill in the art (*In re Gulack*). Nonetheless, either of the “customers or trading partners” (col. 1, lines 27-28) can be the claimed buyers or sellers providing input to the system.

Claim 4: Within the source schema, some of the classes are leaf nodes, such as “Record 2” and “Record 8”.

Claim 5: The mappings (16a) and 16(b) define intersections between the product ontologies of the source class and target class. A product ontology inherently defines at least some attribute of a product, such as the name of the product, so mappings become intersections of attributes. These mappings are also ontologies (i.e. relationships) that further define both the source classes and target classes.

Claim 6: The mappings can define intersections between any classes (parent class or subclass) in either the source schema or target schema.

Claim 7: The subject matter of claim 7 only differs from Vedula et al. in that the classes in the source schema and target schema are not defined as being associated with a seller. In other words, the records do not define seller information. However, modifying the records to define seller information is a modification to include non-functional descriptive material which is considered obvious to one of ordinary skill in the art (*In re Gulack*, cited above).

Claim 8: The source records and target records are XML business documents. Any of the mapping linkages (16a or 16b) constitute pointers. Since either a single document or a set of documents constitutes a database, the mapping links define pointers between databases. Modifying the documents to refer to seller information would have been a modification to

include non-functional descriptive material, and would have been obvious to one of ordinary skill in the art, as per *In re Gulack*.

Claim 9: See remarks for claim 1.

Claim 10: See remarks for claim 2.

Claim 11: See remarks for claim 3.

Claim 12: See remarks for claim 4.

Claim 13: See remarks for claim 5.

Claim 14: See remarks for claim 6.

Claim 15: See remarks for claim 7.

Claim 16: See remarks for claim 8.

Claim 17: See remarks for claim 1.

Claim 18: See remarks for claim 2.

Claim 19: See remarks for claim 3.

Claim 20: See remarks for claim 4.

Claim 21: See remarks for claim 5.

Claim 22: See remarks for claim 6.

Claim 23: See remarks for claim 7.

Claim 24: See remarks for claim 8.

Claim 25: See remarks for claim 1.

Claim 26: See remarks for claim 1-3 and 8.

Claim 27: See remarks for claims 1-3 and 8.

Claim 28: See remarks for claims 1-3 and 8.

Remarks

Applicant's arguments have been considered.

Applicant's arguments are primarily addressed to the three features added to amended claim 1. In particular, applicant argues that Vedula et al. lacks: (1) a global content directory providing buyers access to sellers, (2) a schema translation tool, and (3) the target schema having a different taxonomy than the source schema. All of these features are taught by Vedula et al. Col. 1, line 24 of Vedula refers to a global content directory in the form of the Internet. This directory is provided to buyers and sellers (col. 1, lines 27-28 "customers and trading partners"). FIG. 5 illustrates a graphical user interface which defines a schema translation tool which translates schema (4) to schema (10). The tool is coupled to the global content directory (coupled to Internet—col. 17, lines 44-46). Furthermore, the source and target taxonomies can be different from one another, such as illustrated in FIG. 5 where the arrangement of classes and subclasses on the left side is different from that on the right side.

With respect to claims 5, 13 and 21, applicant argues that Vedula does not teach determining the intersection of product attributes. This argument is not correct. The mappings (16a) and 16(b) define intersections between the product ontologies of the source class and target class. A product ontology inherently defines at least some attribute of a product, such as the name of the product, so mappings become intersections of attributes.

With respect to claims 6, 14 and 22, applicant argues that Vedula does not disclose an ontology generation module. This argument is not correct. The ontology generation module is

Art Unit: 2164

the processing engine (26) and map (28) illustrated in FIG. 2 which support the creation of the graphical interface in FIG. 5.

Applicant also argues against an alleged assertion of Official Notice. This argument is moot, as assertion of Official notice has not been made. The rationale for obviousness is based on the finding of non-functional descriptive material in the claims, and the assertion that such non-functional descriptive material is considered to have been obvious, given the case law of *In re Gulack*.

This action follows the filing of an RCE request and has been made non-final.

Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (571) 272-4084.



Sam Rimell
Primary Examiner
Art Unit 2164